

CLAIMS

1 1. A method of allocating resources in a network, comprising:
2 accessing data from a fixed wireless loop network having a plurality of
3 stations which are each associated with a plurality of remote units, each plurality of
4 remote units assigned to receive communication service from the associated station;
5 comparing communication service load data associated with one or more
6 stations to a communications load criteria to identify a potentially overloaded station;
7 and
8 reducing the number of remote units assigned to receive
9 communication service from the potentially overloaded station.

1 2. The method of claim 1, wherein the fixed wireless loop network is a
2 hypothetical network. A

1 3. The method of claim 1, wherein the data from the fixed wireless loop network
2 includes data from a service area plot.

1 4. The method of claim 3, wherein the service area plot is a service area plot for
2 a hypothetical network.

1 5. The method of claim 3, wherein the service area plot is a corrected service
2 area plot.

1 6. The method of claim 3, wherein the service area plot is a best server plot.

1 7. The method of claim 3, wherein the service area plot is a best interference
2 plot.

1 8. The method of claim 3, wherein the service area plot is divided into bins.

1 9. The method of claim 1, wherein the communication service load data includes
2 a level of communication service load projected for a future date.

1 10. The method of claim 1, wherein the communication service load data includes
2 an approximate level of communication service for a peak usage time.

1 11. The method of claim 1, wherein comparing communication service load data
2 from one or more stations to communications load criteria includes comparing the
3 communication service load data to a communication service load threshold.

1 12. The method of claim 8, wherein the communication service load threshold is
2 the communication service capacity of the potentially overloaded station.

1 13. The method of claim 1, wherein reducing the number of remote units
2 receiving communication service from the potentially overloaded station includes
3 identifying a re-assignable remote unit, the re-assignable remote unit being a remote
4 unit assigned to receive communication service from the potentially overloaded
5 station and capable of receiving communication service from a substitute station.

1 14. The method of claim 13, wherein reducing the number of remote units
2 receiving communication service from the potentially overloaded station includes
3 applying re-assignment criteria to the re-assignable remote unit to determine whether
4 the re-assignable remote unit can be re-assigned to the substitute station.

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1 15. The method of claim 14, wherein applying the reassignment criteria includes
2 determining whether re-assigning the re-assignable remote unit to the substitute
3 station would cause the substitute station to become a potentially overloaded station.

1 16. The method of claim 14, wherein applying the reassignment criteria includes
2 comparing a strength of a signal from the substitute station against a signal strength
3 threshold.

1 17. The method of claim 14, wherein applying the reassignment criteria includes
2 comparing the strength of an interference signal experienced by the substitute station
3 to an interference threshold.

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1 18. The method of claim 14, wherein applying the reassignment criteria includes
2 comparing a strength of a signal from the substitute station against a signal strength
3 threshold and determining whether re-assigning the re-assignable remote unit to the
4 substitute station would cause the substitute station to become a potentially
5 overloaded station.

1 19. The method of claim 14, wherein applying the reassignment criteria includes
2 comparing a strength of a signal from the substitute station against a signal strength
3 threshold and comparing the strength of an interference signal experienced by the
4 substitute station to an interference threshold.

1 20. The method of claim 14, wherein applying the reassignment criteria includes
2 determining whether re-assigning the re-assignable remote unit to the substitute
3 station would cause the substitute station to become a potentially overloaded station
4 and comparing the strength of an interference signal experienced by the substitute
5 station to an interference threshold.

1 21. The method of claim 14, wherein applying the reassignment criteria includes
2 determining whether re-assigning the re-assignable remote unit to the substitute
3 station would cause the substitute station to become a potentially overloaded station,
4 comparing the strength of an interference signal experienced by the substitute station
5 to an interference threshold, and comparing a strength of a signal from the substitute
6 station against a signal strength threshold.

1 22. The method of claim 1, further comprising:
2 creating a service area plot which accounts for remote units re-assigned from
3 one station to a substitute station.

1 ~~23.~~ A signal bearing medium including machine readable instructions executable
2 by a processing apparatus to perform a method of allocating resources in a network,
3 the method comprising:
4 accessing data from a fixed wireless loop network having a plurality of
5 stations which are each associated with a plurality of remote units, each plurality of
6 remote units assigned to receive communication service from the associated station;
7 comparing communication service load data associated with one or more
8 stations to a communications load criteria to identify a potentially overloaded station;
9 and
10 reducing the number of remote units assigned to receive communication
11 service from the potentially overloaded station.
12 comparing communication service load data from one or more stations to a
13 communications load criteria to identify a potentially overloaded station; and
14 reducing the number of remote units receiving communication service from
15 the potentially overloaded station.

1 24. The medium of claim 22, wherein the fixed wireless loop network is a
2 hypothetical network.

1 25. The medium of claim 22, wherein the data from the fixed wireless loop
2 network includes data from a service area plot.

1 26. The medium of claim 25, wherein the service area plot is a service area plot
2 for a hypothetical network.

1 27. The medium of claim 25, wherein the service area plot is a corrected service
2 area plot. A

1 28. The medium of claim 25, wherein the service area plot is a best server plot.

1 29. The medium of claim 25, wherein the service area plot is a best interference
2 plot.

1 30. The medium of claim 25, wherein the service area plot is divided into bins.

1 31. The medium of claim 23, wherein the communication service load data
2 includes a level of communication service load projected for a future date.

1 32. The medium of claim 23, wherein the communication service load data
2 includes an approximate level of communication service for a peak usage time.

1 33. The medium of claim 23, wherein comparing communication service load
2 data from one or more stations to a communications load criteria includes comparing
3 the communication service load data to a communication service load threshold.

1 34. The medium of claim 33, wherein the communication service load threshold is
2 the communication service capacity of the potentially overloaded station.

1 35. The medium of claim 23, wherein reducing the number of remote units
2 receiving communication service from the potentially overloaded station includes
3 identifying a re assignable remote unit, the re assignable remote unit being a remote
4 unit assigned to receive communication service from the potentially overloaded
5 station and capable of receiving communication service from a substitute station.
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1 36. The medium of claim 35, wherein reducing the number of remote units
2 receiving communication service from the potentially overloaded station includes
3 applying a re assignment criteria to the re assignable remote unit to determine
4 whether the re assignable remote unit can be re assigned to the substitute station.

1 37. The medium of claim 36, wherein applying the reassignment criteria includes
2 determining whether re assigning the re assignable remote unit to the substitute
3 station would cause the substitute station to become a potentially overloaded station.

1 38. The medium of claim 36, wherein applying the reassignment criteria includes
2 comparing a strength of a signal from the substitute station against a signal strength
3 threshold.

1 39. The medium of claim 36, wherein applying the reassignment criteria includes
2 comparing the strength of an interference signal experienced by the substitute station
3 to an interference threshold.

1 40. The medium of claim 36, wherein applying the reassignment criteria includes
2 comparing a strength of a signal from the substitute station against a signal strength
3 threshold and determining whether re-assigning the re-assignable remote unit to the
4 substitute station would cause the station to become a potentially overloaded station.

1 41. The medium of claim 36, wherein applying the reassignment criteria includes
2 comparing a strength of a signal from the substitute station against a signal strength
3 threshold and comparing the strength of an interference signal experienced by the
4 substitute station to an interference threshold.

1 42. The medium of claim 36, wherein applying the reassignment criteria includes
2 determining whether re-assigning the re-assignable remote unit to the substitute
3 station would cause the substitute station to become a potentially overloaded station
4 and comparing the strength of an interference signal experienced by the substitute
5 station to an interference threshold.

1 43. The medium of claim 36, wherein applying the reassignment criteria includes
2 determining whether re-assigning the re-assignable remote unit to the substitute
3 station would cause the substitute station to become a potentially overloaded station,
4 comparing the strength of an interference signal experienced by the substitute station
5 to an interference threshold, and comparing a strength of a signal from the substitute
6 station against a signal strength threshold.

1 44. The medium of claim 23, wherein the method further comprises:

2 creating a service area plot which accounts for remote units re-assigned from
3 one station to a substitute station.

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